

What is claimed is:

1. A polishing apparatus for polishing a workpiece, said polishing apparatus comprising:

a polishing unit including:

a polishing table having a polishing surface thereon; and

a top ring for pressing the workpiece against said polishing surface; and

a cleaning unit including:

a rotatable shaft configured to be vertically movable;

at least one holding mechanism mounted to said rotatable shaft for detachably holding the workpiece; and

a plurality of cleaning devices disposed around said rotatable shaft for cleaning the workpiece which has been polished in said polishing unit.

2. The polishing apparatus according to claim 1, wherein said plurality of cleaning devices is disposed concentrically with said rotatable shaft.

3. The polishing apparatus according to claim 1, wherein said at least one holding mechanism comprises a vacuum chucking mechanism.

4. The polishing apparatus according to claim 1, wherein said at least one holding mechanism comprises a chucking member for holding a periphery of the workpiece.

5. The polishing apparatus according to claim 1, wherein said at least one holding mechanism comprises a plurality of holding mechanisms mounted to said rotatable shaft for detachably holding the workpiece.

6. A polishing apparatus for polishing a workpiece, said polishing apparatus comprising:

a plurality of polishing units, each of said polishing units including:

a polishing table having a polishing surface thereon;

- a top ring for pressing the workpiece against said polishing surface; and
- a moving mechanism for moving said top ring between a polishing position on said polishing surface and a workpiece receiving/delivering position;
- a linear transferring mechanism for transferring the workpiece between a plurality of transferring positions including the workpiece receiving/delivering position;
- a receiving/delivering mechanism disposed at the workpiece receiving/delivering position for receiving and delivering the workpiece between said linear transferring mechanism and said top ring; and
- a controller operable to operate said linear transferring mechanism so as to perform one of serial processing for a plurality of workpieces and parallel processing for a plurality of workpieces.

7. A substrate processing apparatus for processing a substrate, said substrate processing apparatus comprising:

- a transferring mechanism for transferring the substrate, said transferring mechanism including:

- chucking members for holding a periphery of the substrate;
 - at least one air cylinder to operate said chucking members, said at least one air cylinder having a valve member and cylinder chambers defined in said at least one air cylinder by said valve member; and
 - a suction device for evacuating one of said cylinder chambers, said one of said cylinder chambers being located on a side of said chucking members.